

CDF Operations Report



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CDF Weekly Meeting

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Outline:

- Store summary
- General activities
- Access tasks
- Quench report

Store Summary

Store	Start	Duration (hours)	Init. lumi (10^{30})	Delivered lumi (nb ⁻¹)	Live int. lumi (nb ⁻¹)	Int Lumi w/Si (nb ⁻¹)	Comments
4021	3/3 Th-F	24.8	78.2	2931.4	2423.3 82.7%	2304.2 78.6%	Pulsar drive test CMP trips
4022	3/4 F-Sa	25.3	103.6	3792.7	2719.7 71.7%	2677.1 70.6%	COT timeouts Cleaning EVB
4023	3/6 Su	19.2	114.5	3608.1	3162.5 87.7%	3163.9 87.7%	Smooth
4024	3/7 M-Tu	30.5	106.5	4467.0	3449.7 77.2%	3129.4 70.1%	b0pcal04 prob. VRB reset prob.
Total		99.8		14799.2	11755.2 79.4%	11274.6 76.2%	

General Activities



- Problems with CMP HV trips at end of last week (voltage reduction helped)
- Test of spare CLC coincidence unit board
- b0dau35 disk replacement
- Several Pulsar studies, including:
 - End-of-store tests to check rates, response to error conditions, muon algo.
 - Between-store tests
- HIGHLUM and PHYSICS trigger table tests with and without beam
 - L3 executable with additional error reporting for Pulsar
 - New L2 tag set
- Silicon lowered SVX and L00 temperature from -8C to -10C
 - Ran end-of-store DMODE calibration at end-of-store prior to change
- VRB replacement (broken reset switches) and firmware upgrade
- Tested SMQIE (shower max) calibration modifications for CPR upgrade
- Recover from quenches Tuesday evening and Wednesday morning

Access Tasks



2 hour controlled access after Tuesday's quench:

- Silicon recovery (highest priority)
 - L00 fuse/power supply checks
- COT TDC board diagnosis
 - Kapton tape onto front panel connector of cot08 slot2
- Move a beam loss counter
 - From west FIB crates to near low beta quad shielding

7 hour controlled access after Wednesday's quench:

- Silicon recovery (highest priority)
 - L00 fuse/power supply checks
- ODH Head Replacement
 - Replaced bad head on SW floor that went bad on Saturday
- CMP inspection for oscillation problem
 - Adjustment of grounds, wont know results for potentially days
- Swap Roman Pot fiber readout board in fcal00
 - led to tunnel access to power cycle a crate hit by Tuesday's quench

Quench Report



- Tuesday evening (17:12):
 - “Shot heard around the world”
 - pbar abort kicker (AAK1) prefire ~5 minutes into store
 - Initial luminosity of 102×10^{30}
 - Quenched at A4, B0, B1, F4, ... hit us hard
 - COT had ramped, silicon was in process of ramping
 - See Silicon talk for dose and damage details
 - AAK1 has prefired 4 times this year, killing two stores
- Wednesday morning (9:32):
 - proton abort kicker (PAK3) prefire just after flattop
 - Quenched at A1, B1, F4 ... hit us hard again!
 - COT was ramping, silicon was at standby
 - Muon chamber trips even though at standby, have checked out OK